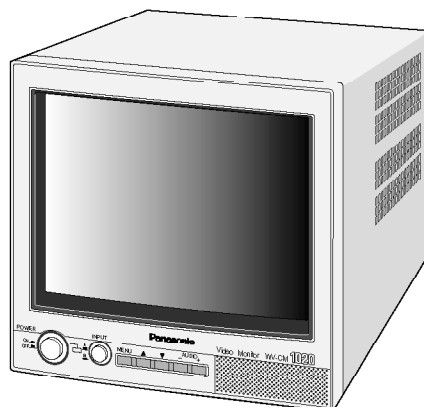


Service Manual

Video Monitor WV-CM1020



SPECIFICATIONS

Power Source :	220 - 240 V AC, 50 Hz
Power Consumption :	Approx. 47 W
Screen Size :	250 mm (9-13/16") diagonal tube screen size, 90° deflection 223 mm (8 3/4") diagonal actual visual size
Horizontal Resolution :	300 TV lines at center
Video Input :	1.0 V[p-p] composite/75 Ω, BNC with Auto Termination
Audio Input :	-8 dB/Hi-z, RCA standard jack
Speaker Output :	0.5 W
Sweep Linearity :	Horizontal: Less than 5 % Vertical: Less than 5%
Sweep Geometry :	Less than 2 %
Ambient Operating Humidity :	Less than 90 %
Ambient Operating Temperature :	-10°C - +50°C (14°F - 122°F)
Dimensions :	220(W) x 220 (H) x 309(D)mm [8-11/16"(W)x8-11/16"(H)x12-3/16"(D)]
Weight :	6.5 kg (14.3 lbs.)

Weights and dimensions shown are approximate.
Specifications are subject to change without notice.

OPTIONAL ACCESSORY

Rack Mount Bracket WV-Q52AE

Panasonic

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distribution is a violation of law.

 WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.

It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.

Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK). NO USER
SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE
PERSONNEL.



This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.



This symbol alerts the user that important literature concerning the operation and maintenance of this has been included. Therefore, it should be read carefully in order to avoid any problems.

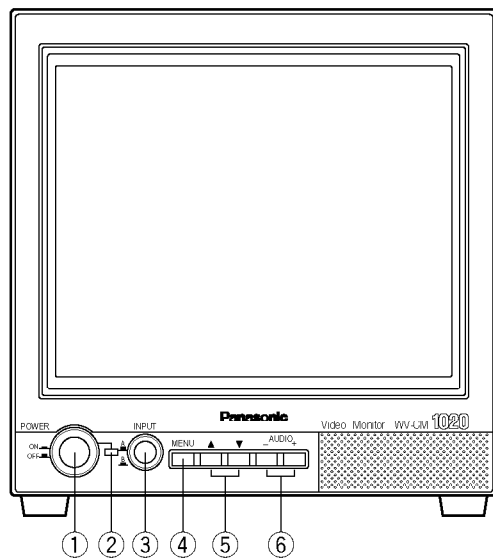
IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are indicated by the "⚠" mark on the schematic diagram and the replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-radiation, shock, fire, or other hazards. Do not modify the original design without permission of manufacture.

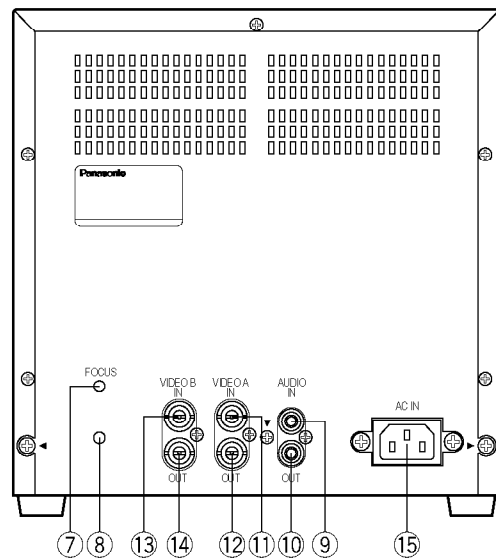
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MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS



- ① **Power Switch (POWER, ON/OFF)**
This is a push-push type switch which turns the power of this monitor on and off.
Press once (switch remains down (—)) to turn on the power of the monitor.
Press again (switch comes up (—)) to turn off the power of the monitor.
Note: There may be a delay of several seconds until the monitor display comes on.
- ② **Power Indicator**
This Indicator is on when the monitor's power is turned on.
- ③ **Input Signal Select Switch (INPUT A/B)**
This is a push-push type switch which selects the signal input A or B.
Press once (switch remains down (—)) to select the INPUT B signal.
Press again (switch comes up (—)) to select the INPUT A signal.
- ④ **Menu Button (MENU)**
Press to display the setup menu.
- ⑤ **Cursor Buttons (▲, ▼)**
Press these buttons to select a parameter by moving the cursor up or down in the parameter rows.
- ⑥ **Increment/Decrement Buttons (AUDIO —, +)**
 - Setup screen adjustment (Menu displayed)
Press these buttons to adjust the level of an item selected in the setup menu.
Note: If you select NORMAL SETTINGS in the Setup menu, and press the Increment/Decrement button (—) or (+), all menu parameters will be restored to the factory default settings.
 - Audio adjustment (Menu not displayed)
Press these buttons to increase or decrease the sound volume.



- ⑦ **Focus Control (FOCUS)**
This control adjusts the screen focus.
- ⑧ **Screen Control**
This control is preset at the factory.
- ⑨ **Audio Input Connector (AUDIO IN)**
For input of audio signal from an outboard device.
- ⑩ **Audio Output Connector (AUDIO OUT)**
The audio input signal connected to the audio input connector ⑨ is looped through to this connector.
- ⑪ **Video A input Connector (VIDEO A IN)**
For input of the PAL composite video signal from an outboard device.
- ⑫ **Video A output Connector (VIDEO A OUT)**
The video input signal connected to the video input connector ⑪ is looped through to this connector and terminated automatically.
- ⑬ **Video B input Connector (VIDEO B IN)**
For input of the PAL composite video signal from an outboard device.
- ⑭ **Video B output Connector (VIDEO B OUT)**
The video input signal connected to the video input connector ⑬ is looped through to this connector and terminated automatically.
- ⑮ **AC Connector (AC IN)**
Connector for AC power supply cord.

ADJUSTMENT PROCEDURE

1. Test Equipments Required

- The following Test Equipments are required for adjustment of the Colour Video Monitor WV-CM1020.
- Video Signal Generator
 - Colour Bar Signal
 - Grayscale Signal (8 stair steps)
 - Crosshatch Signal or Dot Signal
 - White Raster Signal
 - Red, Green, Blue each Raster Signal
- Monoscope Pattern Signal Generator
- Audio Analyzer
- Oscilloscope
- Digital Voltmeter
- Degaussing Coil
- Ceramic Screwdriver
- Electric Torque Driver

2. Disassembling Procedure for the Adjustment

- Referring to Fig. 2-1, remove seven screws that secure the Upper Cover and remove the Upper Cover.

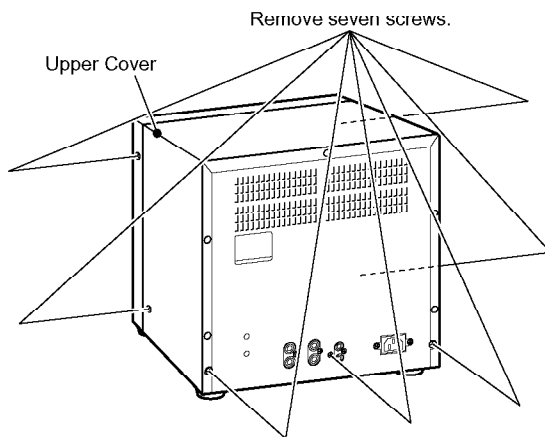


Fig. 2-1

3. Connection and Setting up for Adjustment

3.1. Connection

- Fig. 3-1 shows the connecting diagram for adjustment procedure of the WV-CM1020.

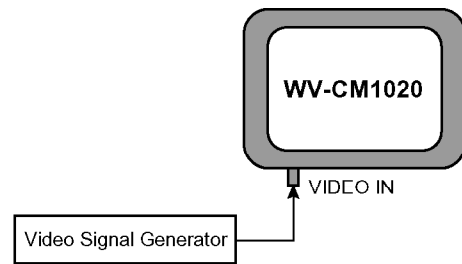


Fig 3-1

- Connect the coaxial cable between Video Input Connector of the WV-CM1020 and Video Output Connector of Video Signal Generator.
- The Fig. 3-2 shows the connecting diagram for the Audio section adjustment procedure.

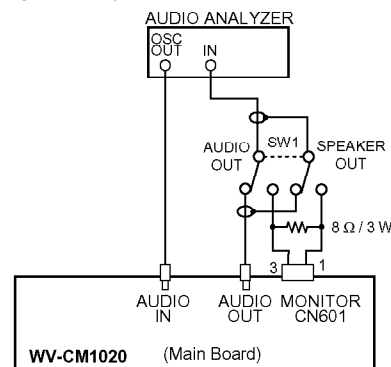


Fig 3-2

- Connect the Oscillator Output terminal of the Audio Analyzer and the Audio Input Connector of the WV-CM1020.
- Disconnect the Speaker from CN601 on the Main Board.
- Connect the Input terminal of the Audio Analyzer and the Audio Output Connector of the WV-CM1020 through Selector (Audio Out or Speaker Out) SW1.
- Terminate the Speaker Output signal with 8 Ω 3W.
- After completion of adjustment, connect the Speaker to CN601 on the Main Board.

3.2. Setting Up

- This adjustment should be done after 20 minutes warm up of the WV-CM1020.

< Initial Setting >

- Turn the Power Switch on.
- Select the Cursor Buttons (▲) or (▼) to the NORMAL SETTINGS position.
- Press the Increment Button (+) or Decrement Button (-), and then all the setting are initialized.
- Turn the Power Switch off.

< Service Menu >

- Turn the Power Switch on while pressing the Increment Button (+), the Decrement Button (–) and the MENU Button simultaneously, and enter to the Service Menu mode.
- Press the MENU Button once, and enter to the DEF MENU.
- The item of the DEF MENU changes as shown in Fig. 3-3.

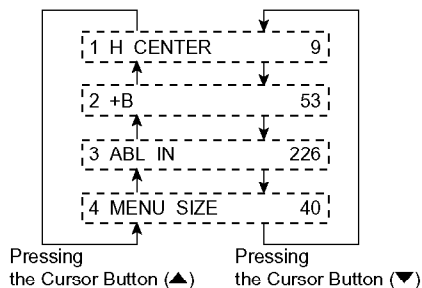


Fig. 3-3

- Press the MENU Button once, and enter to the W/B MENU.
- The item of the W/B MENU changes as shown in Fig. 3-4.

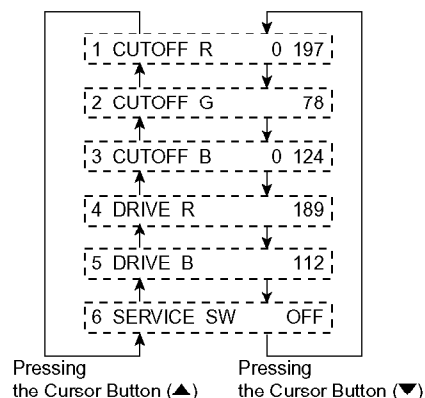


Fig. 3-4

- Press the MENU Button once, and enter to the SUB MENU.
- The item of the SUB MENU changes as shown in Fig. 3-5

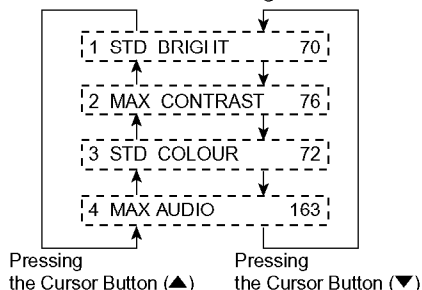


Fig. 3-5

- Press the MENU Button once, and enter to the ADJ MENU.
- The ADJ MENU is as shown in Fig. 3-6.

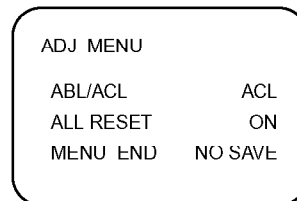


Fig. 3-6

4. Adjustment Procedure

- Refer to the Location of the Test Points and Adjusting Controls on the page 8.

(1). 120V Adjustment

Test Point: TP804 (120V)

CRT Board

Adjust: +B

Increment Button (+)

Decrement Button (–)

SCREEN Control

Flyback Transformer on the Main Board

- Supply the Monoscope Pattern signal to Video Input Connector.
- Connect the Digital Voltmeter to TP804.
- Select the MENU Button to the DEF MENU.
- Select the Cursor Buttons (▲) or (▼) to the +B position.
- Adjust the Increment Button (+) or Decrement Button (–) so that +B becomes 65.
- Adjust the SCREEN control so that the stair step of the Monoscope pattern is visibly certain.
- Adjust the Increment Button (+) or Decrement Button (–) so that the DC voltage at TP804 becomes 120 ± 0.2 V.
- Supply the Grayscale signal to Video Input Connector.
- Select the Cursor Buttons (▲) or (▼) to the ABL IN position, and then the reference voltage is inputted to the micro computer.
- Select the MENU Button to the ADJ MENU.
- Select the Cursor Buttons (▲) or (▼) to the MENU END position.
- Press the Increment Button (+) or Decrement Button (–) for saving data.
- Turn the Power Switch off.

(2). Screen Cut off Coarse Adjustment

Test Point: TP802 (G) **CRT Board**
Adjust: CUTOFF G **Increment Button (+)**
Decrement Button (-)

SCREEN Control

Flyback Transformer on the Main Board

- Turn the Power Switch on while pressing the Increment Button (+), the Decrement Button (-) and the MENU Button simultaneously, and enter to the Service Menu mode.
- Supply the Grayscale signal to Video Input Connector.
- Connect the Oscilloscope to TP802.
- Set the Input Selector of the Oscilloscope to the DC Mode.
- Select the MENU Button to the W/B MENU.
- Select the Cursor Buttons (▲) or (▼) to the CUTOFF G position.
- Adjust the Increment Button (+) or Decrement Button (-) so that G Pedestal becomes 110 ± 0.2 V as shown in Fig. 4-1.

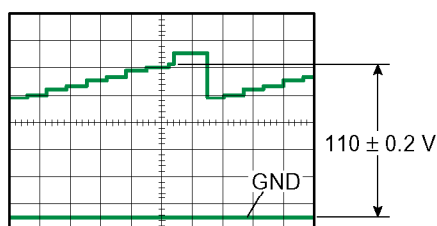


Fig. 4-1

- Adjust the SCREEN control so that the 8th step of stair step becomes cut off.

(3). Contrast Adjustment

Test Point: TP802 (G) **CRT Board**
Adjust: MAX CONTRAST **Increment Button (+)**
Decrement Button (-)

- Connect the Oscilloscope to TP802.
- Set the Input Selector of the Oscilloscope to the AC Mode.
- Select the MENU Button to the SUB MENU.
- Select the Cursor Buttons (▲) or (▼) to the MAX CONTRAST position.
- Adjust the Increment Button (+) or Decrement Button (-) so that the output of TP802 becomes 40 Vp-p as shown in Fig. 4-2.

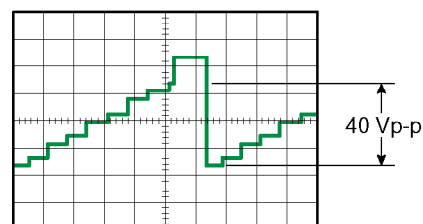


Fig. 4-2

(4). Colour Adjustment

Test Point: TP803 (B) **CRT Board**
Adjust: STD COLOUR **Increment Button (+)**
Decrement Button (-)

- Supply the Colour Bar signal to the Video Input Connector.
- Connect the Oscilloscope to TP803.
- Select the Cursor Buttons (▲) or (▼) to the STD COLOUR position.
- Adjust the Increment Button (+) or Decrement Button (-) so that the output of TP803 becomes 15 Vp-p as shown in Fig. 4-3.

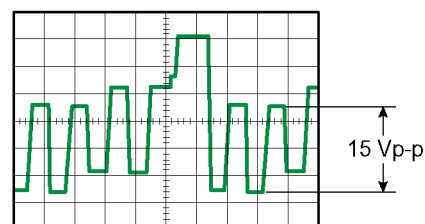


Fig. 4-3

(5). H & V Centering and Size Coarse Adjustment

Adjust: VR401 (V-SIZE) **Main Board**
 VR403 (V-CENTER) **Main Board**
 L502 (H-SIZE) **Main Board**
 H-CENTER **Increment Button (+)**
Decrement Button (-)

Observe: Colour Video Monitor

- Supply the Monoscope Pattern signal to the Video Input Connector.
- Select the MENU Button to the DEF MENU.
- Select the Cursor Buttons (▲) or (▼) to the H-CENTER position.
- Adjust VR403 so that the Monoscope Pattern signal positions at the vertical center on the CRT screen.
- Adjust VR401 so that the full vertical height becomes plus 6 % overscanning.
- Adjust L502 so that the full horizontal width becomes plus 8 % overscanning.

- Adjust the Increment Button (+) or Decrement Button (–) so that the screen is set to the horizontal center position.
- Repeat above adjustment until they are satisfied.

(6). Character Size Adjustment

Test Point: Emitter of Q118

Adjust: MENU SIZE Increment Button (+)
Decrement Button (–)

- Supply the Colour Bar signal to the Video Input Connector.
- Connect CH1 of the Oscilloscope to the Emitter of Q118.
- Connect CH2 of the Oscilloscope to the Video Output Connector.
- Select the MENU Button to the DEF MENU.
- Select the Cursor Buttons (▲) or (▼) to the MENU SIZE position.
- Adjust the Increment Button (+) or Decrement Button (–) so that the H-scan time becomes $44 \pm 0.5 \mu\text{s}$ as shown in Fig. 4-4.

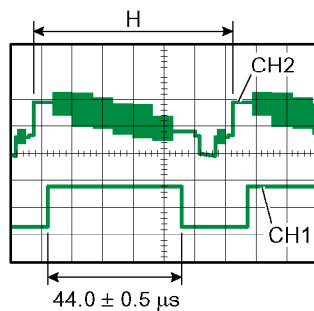


Fig. 4-4

(7). Audio Maximum Output Power Setting

Adjust: MAX AUDIO Increment Button (+)
Decrement Button (–)

Observe: Audio Analyzer

- Set the Selector (Audio Out or Speaker Out) SW1 to the Speaker Out position.
- Set the Output Level of the Audio Analyzer to $-14 \pm 0.3 \text{ dBV}$, 1 kHz $\pm 3 \%$.
- Select the MENU Button to the SUB MENU.
- Select the Cursor Buttons (▲) or (▼) to the MAX AUDIO position.
- Observing the Audio Analyzer, adjust the Increment Button (+) or Decrement Button (–) so that the output level becomes $5.2 \pm 0.2 \text{ dBV}$.

(8). Screen Cut off Fine Adjustment

Test Point: TP802 (G)

CRT Board

Adjust: STD BRIGHT Increment Button (+)
Decrement Button (–)
CUTOFF G Increment Button (+)
Decrement Button (–)

SCREEN Control

Flyback Transformer on the Main Board

- Supply the Grayscale signal to the Video Input Connector.
- Connect the Oscilloscope to TP802.
- Set the Input Selector of the Oscilloscope to the DC mode.
- Select the Cursor Buttons (▲) or (▼) to the STD BRIGHT position.
- Adjust the Increment Button (+) or Decrement Button (–) so that the STD BRIGHT becomes 70.
- Select the MENU Button to the W/B MENU.
- Select the Cursor Buttons (▲) or (▼) to the CUTOFF G position.
- Adjust the Increment Button (+) or Decrement Button (–) so that the G Pedestal becomes to $110 \pm 2 \text{ V}$ as shown in Fig. 4-5.

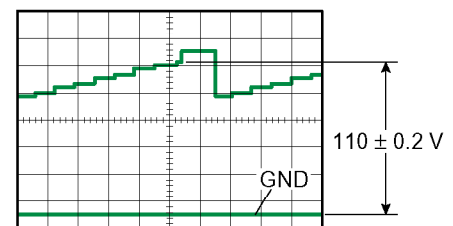


Fig. 4-5

- Adjust the SCREEN control so that the 8th step of the stair step becomes cut off.

(9). White Balance Coarse Adjustment

Adjust: CUTOFF R Increment Button (+)
Decrement Button (–)
CUTOFF B Increment Button (+)
Decrement Button (–)
DRIVE R Increment Button (+)
Decrement Button (–)
DRIVE B Increment Button (+)
Decrement Button (–)

Observe: Colour Video Monitor

- Select the Cursor Buttons (▲) or (▼) to the CUTOFF R, CUTOFF B, DRIVE R or DRIVE B position.
- Adjust the Increment Button (+) or Decrement Button (–) so that the 2nd step and the 7th step of the stair step become white.

(10). Focus Coarse Adjustment

Adjust: FOCUS control

Flyback Transformer on the Main Board

Observe: Colour Video Monitor

- Supply the Cross Hatch signal or the Dot signal to the Video Input Connector.
- Adjust the FOCUS control for the best focus.

(11). Purity Adjustment

Adjust: Purity Magnet

Deflection Coil

Observe: Colour Video Monitor

- This adjustment should be done after aging for more than 20 minutes.
- Adjust the FOCUS control on the Flyback Transformer for the best focus and then disconnect the input signal.
- Degauss the CRT screen with a degaussing coil.
- Loosen the screw that secure the deflection coil.
- Move back the deflection coil until it reaches to the purity magnet.

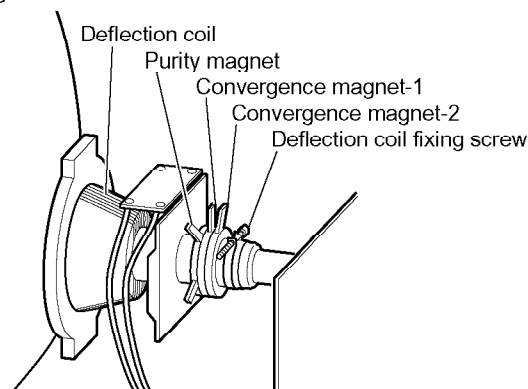


Fig. 4-6

- Supply the red colour signal to the Video Input Connector.
- Adjust the purity magnet so that the red area comes to the center on the CRT screen as shown in Fig. 4-7.

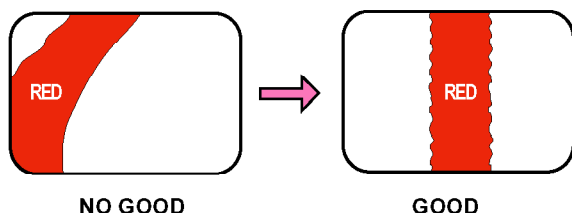


Fig. 4-7

- Rotate the deflection coil to find the point where the center portion of the red area becomes equal on the CRT screen.

- Move the deflection coil forward until the red colour fully occupies the entire screen and tighten the screws that secure the deflection coil.

(12). Convergence Adjustment

Adjust: Convergence magnet-1

Convergence magnet-2

Observe: Colour Video Monitor

- Supply the Cross Hatch signal or the Dot Signal to the Video Input Connector.
- Adjust the FOCUS control on the Flyback Transformer for the best focus.
- Degauss the CRT screen with a degaussing coil.
- Adjust the Convergence magnet-2 so that the red and blue dots on the center area of the CRT screen is overlapped.
- Adjust the Convergence magnet-1 so that the green and magenta (red+blue) dots on the center area of the CRT screen is overlapped.
- Repeat above adjustment until no discrepancy appears on the entire screen.

(13). White Balance Adjustment

Adjust:	CUTOFF R	Increment Button (+)
		Decrement Button (-)
	CUTOFF B	Increment Button (+)
		Decrement Button (-)
	DRIVE R	Increment Button (+)
		Decrement Button (-)
	DRIVE B	Increment Button (+)
		Decrement Button (-)

Observe: Colour Video Monitor

- Supply the White Colour signal or the Dot Signal to the Video Input Connector.
- Select the MENU Button to the W/B MENU.
- Select the Cursor Buttons (▲) or (▼) to the CUTOFF R, CUTOFF B, DRIVE R or DRIVE B position.
- Adjust the Increment Button (+) or Decrement Button (-) so that the raster on the CRT Screen becomes White.

(14). Sub Bright Adjustment

Adjust:	STD BRIGHT	Increment Button (+)
		Decrement Button (-)

Observe: Colour Video Monitor

- Supply the Grayscale signal to the Video Input Connector.
- Isolate the CRT screen from the outside light source.
- Select the MENU Button to the SUB MENU.

- Select the Cursor Buttons (▲) or (▼) to the STD BRIGHT position.
- Adjust the Increment Button (+) or Decrement Button (–) so that the first step from the black side is just suppressed.
- Select the MENU Button to the DEF MENU.
- Select the Cursor Buttons (▲) or (▼) to the ABL IN position for saving data.

(15). H & V Centering and Size Fine Adjustment

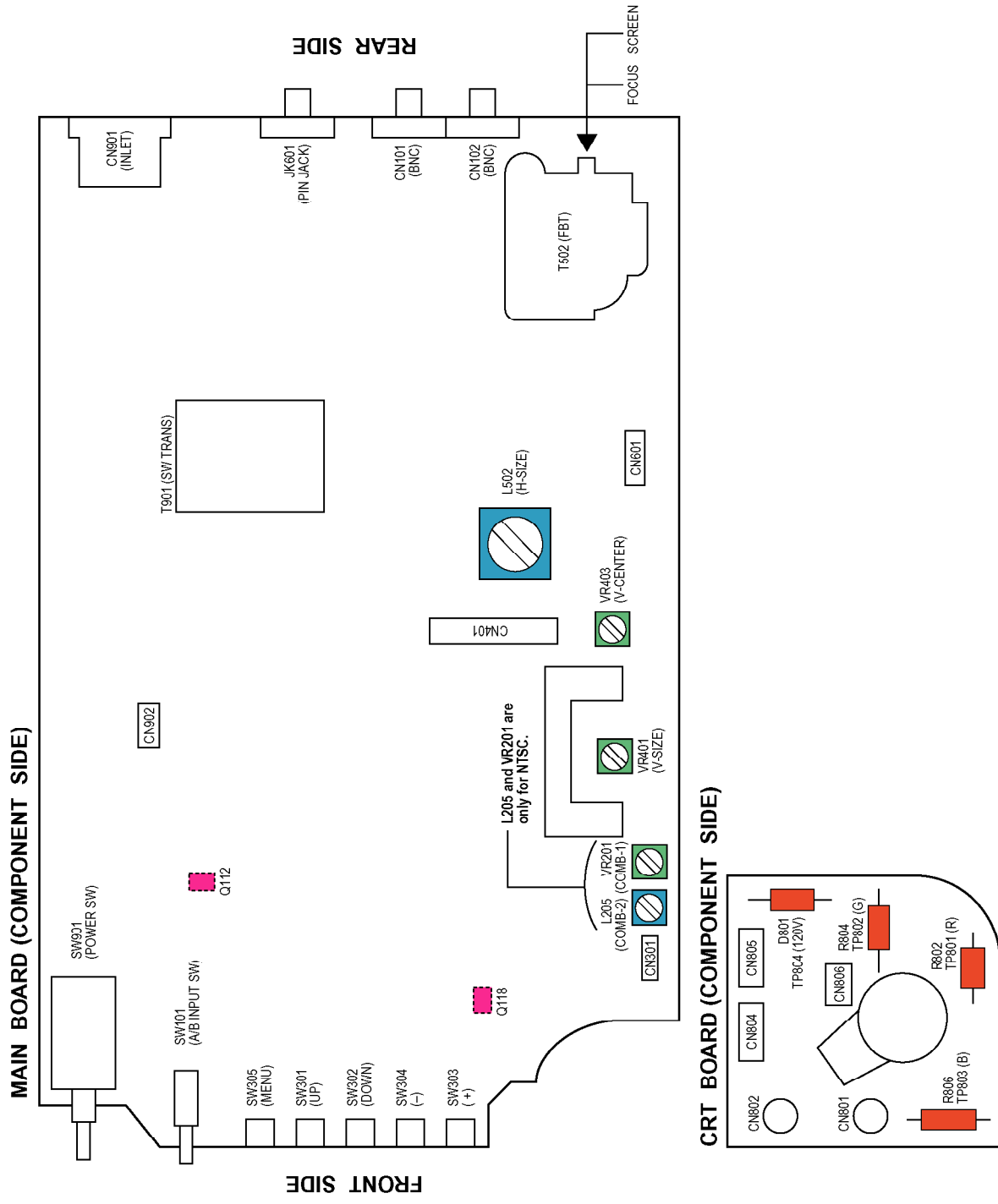
Adjust:

VR401 (V-SIZE)	Main Board
VR403 (V-CENTER)	Main Board
L502 (H-SIZE)	Main Board
H-CENTER	Increment Button (+)
	Decrement Button (–)

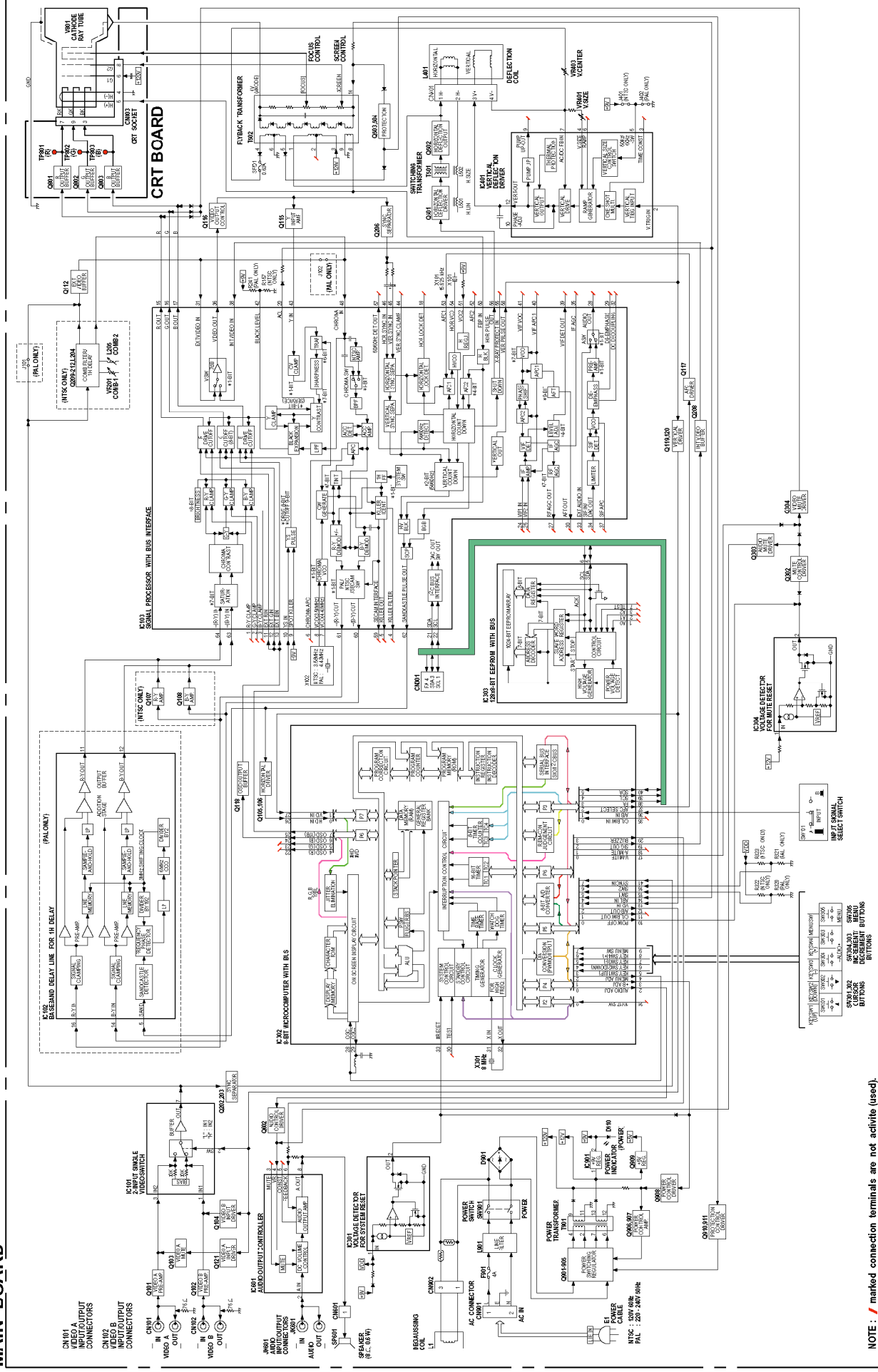
Observe: Colour Video Monitor

- Supply the Monoscope Pattern signal to the Video Input Connector.
- Select the MENU Button to the DEF MENU.
- Select the Cursor Buttons (▲) or (▼) to the H-CENTER position.
- Adjust VR403 so that the Monoscope Pattern signal positions at the vertical center on the CRT screen.
- Adjust VR401 so that the full vertical height becomes plus 6 % overscanning.
- Adjust L502 so that the full horizontal width becomes plus 8 % overscanning.
- Adjust the Increment Button (+) or Decrement Button (–) so that the screen is set to the horizontal center position.
- Repeat above adjustment until they are satisfied.
- Select the MENU Button to the ADJ MENU.
- Select the Cursor Buttons (▲) or (▼) to the MENU END position.
- Press the Increment Button (+) or Decrement Button (–) for saving data.
- Turn the Power Switch off.

LOCATION OF TEST POINTS AND ADJUSTING CONTROLS

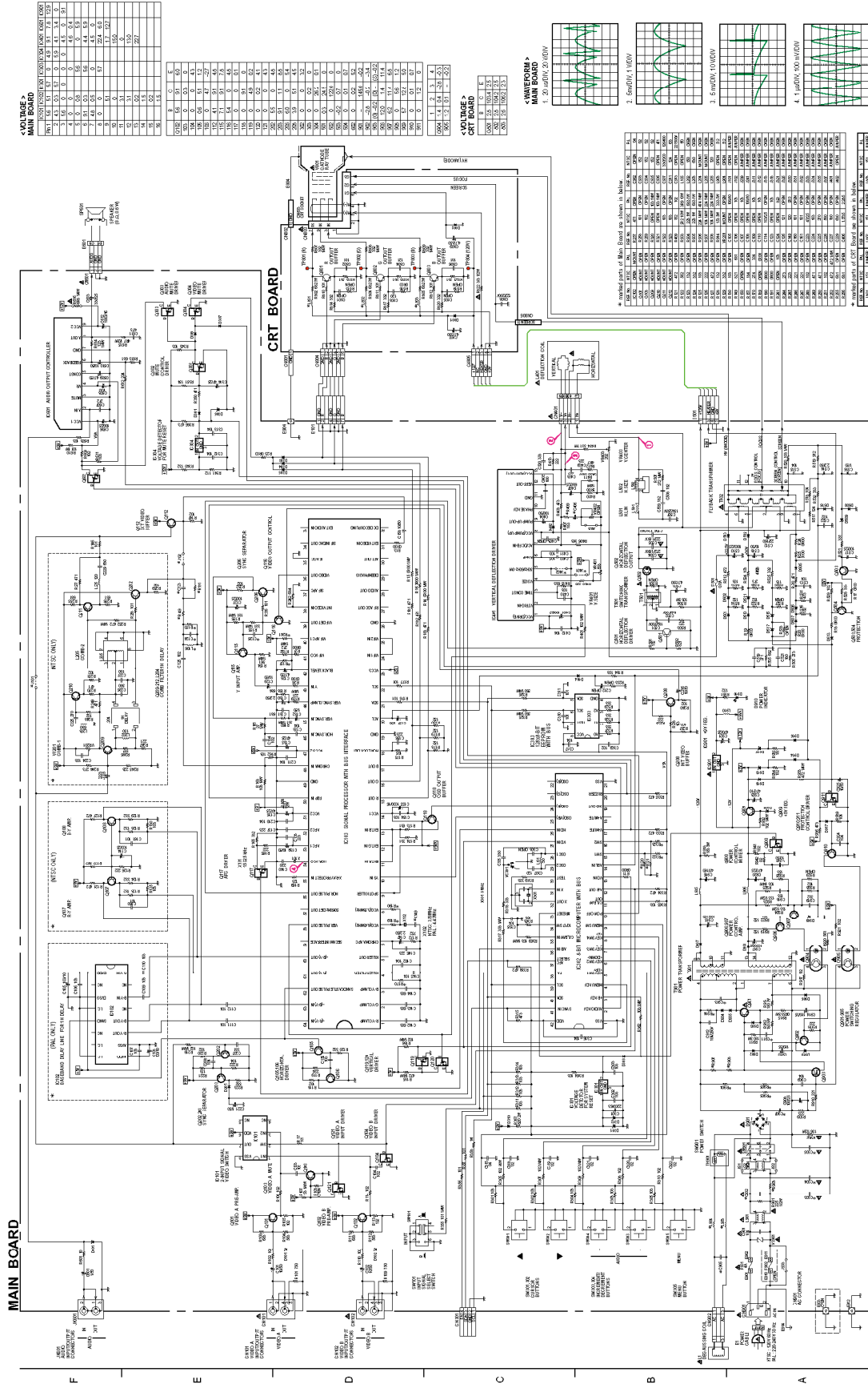


BLOCK DIAGRAM



NOTE: / marked connection terminals are not active (used).

SCHEMATIC DIAGRAM



Important safety notice
Components identified by "Δ" mark have special characteristics for safety.
When replacing any of these components, use only manufacturer's specified parts.

Note: The value indicated in the schematic diagram should be read as follows:

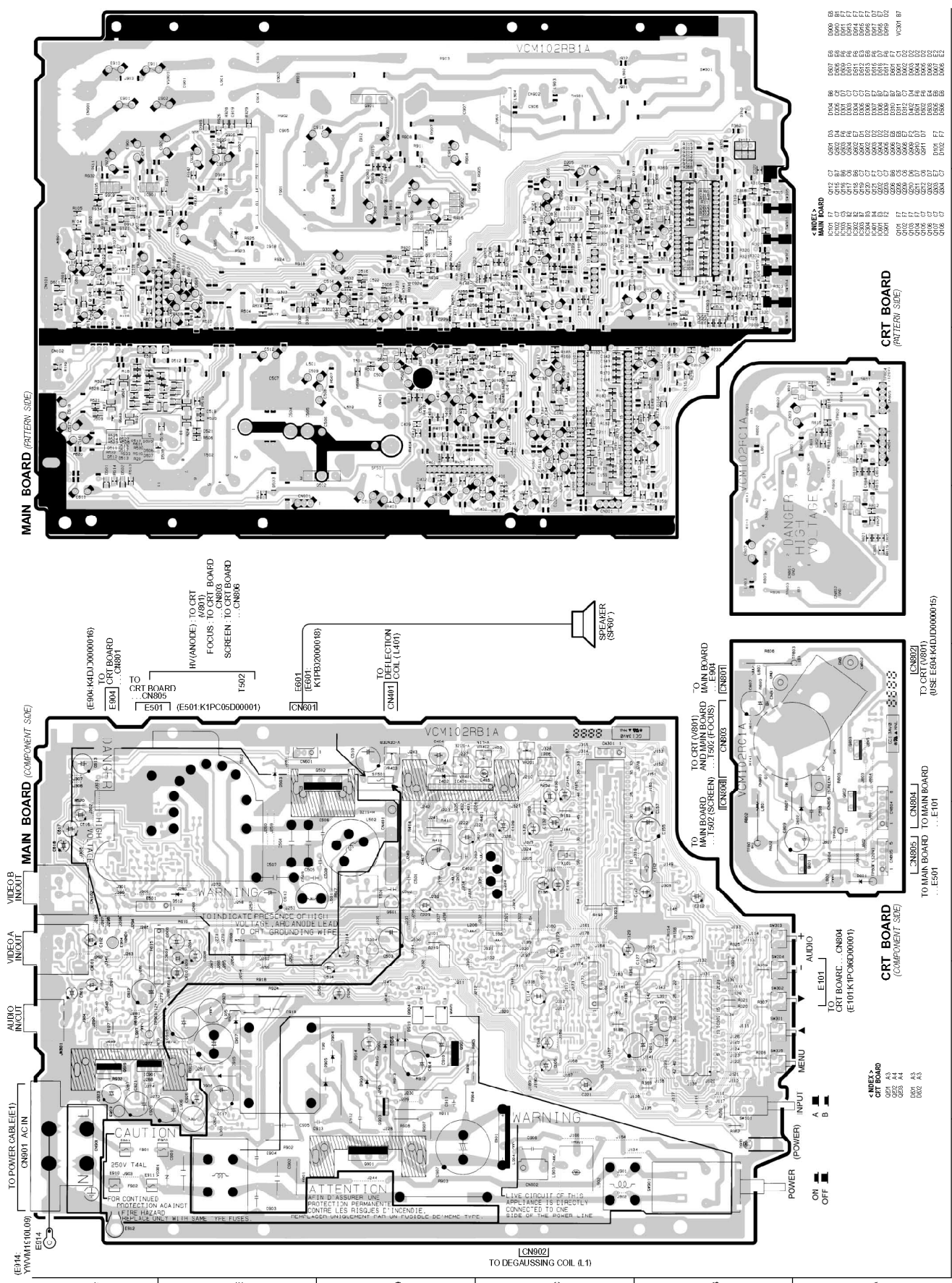
◀Example▶			
For Resistor		For Capacitor ¹ (Except Electrolytic Capacitor and Tantalum Capacitor)	
330	$33 \times 10^{-3} = 33\Omega$	820	$82 \times 10^{-9} = 82\text{ nF}$
561	$56 \times 10^{-3} = 560\Omega$	102	$10 \times 10^{-8} = 100\text{ nF} = 0.001\mu\text{F}$
123	$12 \times 10^{-3} = 12\Omega$	404	$40 \times 10^{-8} = 400\text{ nF} = 0.4\mu\text{F}$
0500	$0.5 = 500\Omega$		
		For Coil	
010	$1 \times 10^{-6} = 1\mu\text{H}$	882	$82 \times 10^{-9} = 82\text{ nH}$
101	$10 \times 10^{-6} = 10\mu\text{H}$		

< INDEX >
MAIN BOARD

< INDEX >
CERT BOARD

< INDEX >
CERT BOARD

CONDUCTOR VIEW



○ Numbers show screws, washers, nuts and etc.

PACKAGING

WV-CM1020

Assembly Components:

- Top View:** M34, M35, Serial No. Label, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100, M101, M102, M103, M104, M105, M106, M107, M108, M109, M110, M111, M112, M113, M114, M115, M116, M117, M118, M119, M120, M121, M122, M123, M124, M125, M126, M127, M128, M129, M130, M131, M132, M133, M134, M135, M136, M137, M138, M139, M140, M141, M142, M143, M144, M145, M146, M147, M148, M149, M150, M151, M152, M153, M154, M155, M156, M157, M158, M159, M160, M161, M162, M163, M164, M165, M166, M167, M168, M169, M170, M171, M172, M173, M174, M175, M176, M177, M178, M179, M180, M181, M182, M183, M184, M185, M186, M187, M188, M189, M190, M191, M192, M193, M194, M195, M196, M197, M198, M199, M200, M201, M202, M203, M204, M205, M206, M207, M208, M209, M210, M211, M212, M213, M214, M215, M216, M217, M218, M219, M220, M221, M222, M223, M224, M225, M226, M227, M228, M229, M230, M231, M232, M233, M234, M235, M236, M237, M238, M239, M240, M241, M242, M243, M244, M245, M246, M247, M248, M249, M250, M251, M252, M253, M254, M255, M256, M257, M258, M259, M260, M261, M262, M263, M264, M265, M266, M267, M268, M269, M270, M271, M272, M273, M274, M275, M276, M277, M278, M279, M280, M281, M282, M283, M284, M285, M286, M287, M288, M289, M290, M291, M292, M293, M294, M295, M296, M297, M298, M299, M300, M301, M302, M303, M304, M305, M306, M307, M308, M309, M310, M311, M312, M313, M314, M315, M316, M317, M318, M319, M320, M321, M322, M323, M324, M325, M326, M327, M328, M329, M330, M331, M332, M333, M334, M335, M336, M337, M338, M339, M340, M341, M342, M343, M344, M345, M346, M347, M348, M349, M350, M351, M352, M353, M354, M355, M356, M357, M358, M359, M360, M361, M362, M363, M364, M365, M366, M367, M368, M369, M370, M371, M372, M373, M374, M375, M376, M377, M378, M379, M380, M381, M382, M383, M384, M385, M386, M387, M388, M389, M390, M391, M392, M393, M394, M395, M396, M397, M398, M399, M400, M401, M402, M403, M404, M405, M406, M407, M408, M409, M410, M411, M412, M413, M414, M415, M416, M417, M418, M419, M420, M421, M422, M423, M424, M425, M426, M427, M428, M429, M430, M431, M432, M433, M434, M435, M436, M437, M438, M439, M440, M441, M442, M443, M444, M445, M446, M447, M448, M449, M450, M451, M452, M453, M454, M455, M456, M457, M458, M459, M460, M461, M462, M463, M464, M465, M466, M467, M468, M469, M470, M471, M472, M473, M474, M475, M476, M477, M478, M479, M480, M481, M482, M483, M484, M485, M486, M487, M488, M489, M490, M491, M492, M493, M494, M495, M496, M497, M498, M499, M500, M501, M502, M503, M504, M505, M506, M507, M508, M509, M510, M511, M512, M513, M514, M515, M516, M517, M518, M519, M520, M521, M522, M523, M524, M525, M526, M527, M528, M529, M530, M531, M532, M533, M534, M535, M536, M537, M538, M539, M540, M541, M542, M543, M544, M545, M546, M547, M548, M549, M550, M551, M552, M553, M554, M555, M556, M557, M558, M559, M560, M561, M562, M563, M564, M565, M566, M567, M568, M569, M570, M571, M572, M573, M574, M575, M576, M577, M578, M579, M580, M581, M582, M583, M584, M585, M586, M587, M588, M589, M590, M591, M592, M593, M594, M595, M596, M597, M598, M599, M600, M601, M602, M603, M604, M605, M606, M607, M608, M609, M610, M611, M612, M613, M614, M615, M616, M617, M618, M619, M620, M621, M622, M623, M624, M625, M626, M627, M628, M629, M630, M631, M632, M633, M634, M635, M636, M637, M638, M639, M640, M641, M642, M643, M644, M645, M646, M647, M648, M649, M650, M651, M652, M653, M654, M655, M656, M657, M658, M659, M660, M661, M662, M663, M664, M665, M666, M667, M668, M669, M670, M671, M672, M673, M674, M675, M676, M677, M678, M679, M680, M681, M682, M683, M684, M685, M686, M687, M688, M689, M690, M691, M692, M693, M694, M695, M696, M697, M698, M699, M700, M701, M702, M703, M704, M705, M706, M707, M708, M709, M710, M711, M712, M713, M714, M715, M716, M717, M718, M719, M720, M721, M722, M723, M724, M725, M726, M727, M728, M729, M730, M731, M732, M733, M734, M735, M736, M737, M738, M739, M740, M741, M742, M743, M744, M745, M746, M747, M748, M749, M750, M751, M752, M753, M754, M755, M756, M757, M758, M759, M760, M761, M762, M763, M764, M765, M766, M767, M768, M769, M770, M771, M772, M773, M774, M775, M776, M777, M778, M779, M780, M781, M782, M783, M784, M785, M786, M787, M788, M789, M790, M791, M792, M793, M794, M795, M796, M797, M798, M799, M800, M801, M802, M803, M804, M805, M806, M807, M808, M809, M810, M811, M812, M813, M814, M815, M816, M817, M818, M819, M820, M821, M822, M823, M824, M825, M826, M827, M828, M829, M830, M831, M832, M833, M834, M835, M836, M837, M838, M839, M840,

REPLACEMENT PARTS LIST

Important Notice

- Components identified by "△" mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
- RTL : Retention Time Limited (No longer available after discontinuing product).

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
MISCELLANEOUS			MAIN BOARD		
V801	△ A22JWG098X	Cathode Ray Tube	PCB1 (RTL)	VM102EKB1AYP	Printed Circuit Board Assy
L1	△ G0ZZ00001535	Degaussing Coil	IC101	C0ZBZ0000013	IC
L401	△ G0F200000001	Deflection Coil	IC102	C0ZBZ0000014	IC
SP601	L0AA70B00001	Speaker	IC103	AN5192K-B	IC
E601	K1PB02000018	Wire Assy for Main Board CN601and SP601	IC301	C0EAJ0000019	IC
E804	K4DJD0000015	Wire Assy for CRT Board CN802 and V801	IC302	C2BAGE000006	IC
M1	YWV5BA1045A1	Front Escutcheon	IC303	C0ZBZ0000015	IC
M2	YWV1AB10/4A4	Special Screw (X2)	IC304	C0EAJ0000019	IC
M4	YWV2NA1113A3	Spacer for Yoke	IC401	YWL47837	IC
M5	YWSF2001	Cord Clamp	IC601	YWAN5265	IC
M7	YWV4JA0254A4	CRT Spring	IC901	△ YWKIA7809PI	IC
M10	YWA5RG01141A3	Power Knob	Q101-103	2SC2412K-T46	Transistor
M11	YWV6JA1159A3	Push Button	Q104	DTC144TKAT46	Transistor
M12	YWV6JA1160A3	Select Button	Q105,106	2SC2412K-T46	Transistor
M13	YWV2SA4756A3	Mounting Angle for Power Switch	Q112,115	2SC2412K-T46	Transistor
M17	UAMS-05SV0	Cord Clamp	Q116	B1ADCF000004	Transistor
M18	YW2092051801	Support	Q117	B1GBCFJN0004	Transistor
M20	YW1E19	Spacer	Q118	2SC2412K-T46	Transistor
M26	YWV2KA1265A2	Left Side Chassis	Q119	B1GBCFJN0004	Transistor
M27	YWV2KA1266A2	Right Side Chassis	Q120,121	DTC144TKAT46	Transistor
M28	YWV2PA1219A3	Insulator	Q202,203	B1ADCF000004	Transistor
M29	YWV5EA2393A2	Bottom Cover	Q206	B1ADCF000004	Transistor
M30	YW3E32	Clip (X2)	Q208	2SC2412K-T46	Transistor
M31	YWV5LA0067A4	Rubber Foot	Q302	B1GBCFNL0001	Transistor
M32	YWA2LA0070A4	Joint	Q303	DTC144TKAT46	Transistor
M34	YWV5EA2394A1	Upper Cover	Q304	DTC143ZKAT46	Transistor
M35	△ YWV7QA5260A4	Main Label for WV-CM1020/B	Q501	2SC3468-DE	Transistor
	YWV7QA5261A4	Main Label for WV-CM1020/G	Q502	△ B1GARRAM0001	Transistor
M36	△ -----	BEAB Label for WV-CM1020/B	Q503,504	2SC2412K-T46	Transistor
M37	△ YWV7MA1091A4	High Voltage Label	Q602	B1GBCFJN0004	Transistor
			Q901	△ 2SC4429-LM	Transistor
			Q902	2SD2576	Transistor
			Q903	B1DEBD000001	FET
			Q904,905	△ YWPC123FY2	Photo Coupler
			Q906	B1ADCF000004	Transistor
			Q907	2SC2412K-T46	Transistor
			Q908	B1GBCFJN0004	Transistor
			Q909	2SD2576	Transistor
			Q910	2SC2412K-T46	Transistor
			Q911	B1GBCFJN0004	Transistor
			VS901	△ YWJ10N471KYB	Varistor
			D101,102	B0BC8R100001	Diode
			D104	YW1SS355T7	Diode
			D205	YW1SS355T7	Diode
			D301	YW1SS355T7	Diode
			D303-305	YW1SS355T7	Diode

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
D306	B0BC5R000002	Diode	R154	ERDS2TJ561T	Carbon 560 ohms 1/4W
D307-310	YW1SS355T7	Diode	R155	ERDS2TJ331T	Carbon 330 ohms 1/4W
D311,312	B0BC5R600003	Diode	R156	ERDS2TJ181T	Carbon 180 ohms 1/4W
D402	YW1T2TA	Diode	R158	ERJ6GEYJ684V	Carbon 680K ohms 1/10W
D501	YW1SS355T7	Diode	R159	ERDS2TJ221T	Carbon 220 ohms 1/4W
D502	B0BC8R100001	Diode	R160	ERDS2TJ561T	Carbon 560 ohms 1/4W
D503	B0HAMR000002	Diode	R161	ERDS2TJ271T	Carbon 270 ohms 1/4W
D505	YW1SS355T7	Diode	R162	ERJ6GEYJ103V	Carbon 10K ohms 1/10W
D506	B0BC3R000006	Diode	R163	ERDS2TJ103T	Carbon 10K ohms 1/4W
D507	YW1SS355T7	Diode	R164	ERG2SJ151P	Metal 150 ohms 2W
D508	B0JDCC000002	Diode	R165	ERJ6GEYJ332V	Carbon 3.3K ohms 1/10W
D509	B0BC01300001	Diode	R166	ERJ6GEYJ222V	Carbon 2.2K ohms 1/10W
D510	YW1SS355T7	Diode	R169	ERJ6GEYJ123V	Carbon 12K ohms 1/10W
D511	B0BC8R100001	Diode	R170	ERJ6GEYJ334V	Carbon 330K ohms 1/10W
D512	YWSFR105STA	Diode	R172	ERJ6GEYJ752V	Carbon 7.5K ohms 1/10W
D513	YW1SS355T7	Diode	R173	ERJ6GEYJ681V	Carbon 680 ohms 1/10W
D515	B0BC01300001	Diode	R174	ERJ6GEYJ331V	Carbon 330 ohms 1/10W
D516	YW1SS355T7	Diode	R175	ERJ6GEYJ105V	Carbon 1M ohms 1/10W
D517	B0BC01300001	Diode	R176,177	ERJ6GEYJ101V	Carbon 100 ohms 1/10W
D601	B0BC8R100001	Diode	R178-180	ERJ6GEYJ152V	Carbon 1.5K ohms 1/10W
D901	B0EBNP000001	Diode	R181-183	ERJ6GEYJ471V	Carbon 470 ohms 1/10W
D902-906	YWSFR105STA	Diode	R184	ERJ6GEYJ103V	Carbon 10K ohms 1/10W
D907	YWERB3710	Diode	R185	ERDS2TJ472T	Carbon 4.7K ohms 1/4W
D908	YWERC3001	Diode	R186	ERDS2TJ102T	Carbon 1K ohms 1/4W
D909	B0BC6R100003	Diode	R189	ERJ6GEY0R00V	Carbon 0 ohm 1/10W
D910	B3ABA0000309	LED	R192	ERDS2TJ272T	Carbon 2.7K ohms 1/4W
D911	B0BC5R600003	Diode	R219	ERDS2TJ102T	Carbon 1K ohms 1/4W
D913	B0BC3R000006	Diode	R220	ERJ6GEYJ102V	Carbon 1K ohms 1/10W
D914	YW1SS355T7	Diode	R221	ERJ6GEYJ153V	Carbon 15K ohms 1/10W
D915	B0BC8R100001	Diode	R222	ERJ6GEYJ104V	Carbon 100K ohms 1/10W
D916,917	YW1SS355T7	Diode	R223	ERJ6GEYJ332V	Carbon 3.3K ohms 1/10W
D918	B0BC6R800007	Diode	R232	ERJ6GEYJ102V	Carbon 1K ohms 1/10W
D919	YWRD7.5FB2	Diode	R236	ERJ6GEYJ101V	Carbon 100 ohms 1/10W
TH901	YWPT451CBG18	Thermistor	R237,238	ERJ6GEYJ103V	Carbon 10K ohms 1/10W
R11	ERJ14Y0R00H	Carbon 0 ohm 1/4W	R239	ERJ6GEYJ222V	Carbon 2.2K ohms 1/10W
R13-20	ERJ14Y0R00H	Carbon 0 ohm 1/4W	R240	ERJ6GEYJ102V	Carbon 1K ohms 1/10W
R23-27	ERJ14Y0R00H	Carbon 0 ohm 1/4W	R241	ERJ6GEYJ103V	Carbon 10K ohms 1/10W
R101	ERJ6GEYJ750V	Carbon 75 ohms 1/10W	R242	ERJ6GEYJ684V	Carbon 680K ohms 1/10W
R102	ERJ6GEYJ102V	Carbon 1K ohms 1/10W	R301-305	ERJ6GEYJ103V	Carbon 10K ohms 1/10W
R103	ERJ6GEYJ683V	Carbon 68K ohms 1/10W	R306,307	ERDS2TJ102T	Carbon 1K ohms 1/4W
R104	ERJ6GEYJ563V	Carbon 56K ohms 1/10W	R308	ERJ6GEYJ102V	Carbon 1K ohms 1/10W
R105,106	ERJ6GEYJ102V	Carbon 1K ohms 1/10W	R309	ERDS2TJ102T	Carbon 1K ohms 1/4W
R107	ERDS2TJ153T	Carbon 15K ohms 1/4W	R310	ERJ6GEYJ102V	Carbon 10K ohms 1/10W
R109	ERJ6GEYJ750V	Carbon 75 ohms 1/10W	R311-314	ERJ6GEYJ103V	Carbon 10K ohms 1/10W
R110	ERJ6GEYJ102V	Carbon 1K ohms 1/10W	R315	ERJ6GEYJ473V	Carbon 47K ohms 1/10W
R111	ERJ6GEYJ683V	Carbon 68K ohms 1/10W	R317	ERDS2TJ333T	Carbon 33K ohms 1/4W
R112	ERJ6GEYJ563V	Carbon 56K ohms 1/10W	R318,319	ERJ6GEYJ333V	Carbon 33K ohms 1/10W
R113,114	ERJ6GEYJ102V	Carbon 1K ohms 1/10W	R320,321	ERDS2TJ103T	Carbon 10K ohms 1/4W
R117	ERJ6GEYJ101V	Carbon 100 ohms 1/10W	R325,326	ERDS2TJ560	Carbon 56 ohms 1/4W
R118	ERJ6GEYJ102V	Carbon 1K ohms 1/10W	R327-329	ERJ6GEYJ333V	Carbon 33K ohms 1/10W
R119	ERJ6GEYJ224V	Carbon 220K ohms 1/10W	R333-335	ERJ6GEYJ472V	Carbon 4.7K ohms 1/10W
R120	ERJ6GEYJ332V	Carbon 3.3K ohms 1/10W	R339	ERJ6GEYJ472V	Carbon 4.7K ohms 1/10W
R146	ERJ6GEYJ101V	Carbon 100 ohms 1/10W	R340	ERJ6ENF1301	Metal 1.3K ohms 1/10W
R147	ERJ6GEYJ102V	Carbon 1K ohms 1/10W	R341	ERJ6ENF1101V	Metal 1.1K ohms 1/10W
R149	ERJ6GEYJ681V	Carbon 680 ohms 1/10W	R343	ERJ6GEYJ103V	Carbon 10K ohms 1/10W

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
R350	ERJ6GEYJ471V	Carbon	470 ohms 1/10W	R616	△ ERQ14AJ6R0P	Fuse Resistor	6.0 ohms 1/4W
R351	ERJ6GEYJ154V	Carbon	150K ohms 1/10W	R901	△ ERC12ZGM225	Solid	2.2M ohms 1/2W
R355	ERDS2TJ101T	Carbon	100 ohms 1/4W	R902	△ ERC12ZGM156	Solid	15M ohms 1/2W
R356-358	ERJ6GEYJ101V	Carbon	100 ohms 1/10W	R903	D0DK3R9J0001	Wire Wound	3.9 ohms
R362	LRDS2TJ103T	Carbon	10K ohms 1/4W	R904,905	ERG1SJ603	Metal	60K ohms 1W
R364,365	ERJ6GEYJ103V	Carbon	10K ohms 1/10W	R906	ERDS2TJ474	Carbon	470K ohms 1/4W
R366	ERJ6GEYJ473V	Carbon	47K ohms 1/10W	R907,908	ERD25FJ224	Carbon	220K ohms 1/4W
R367	ERG2SJ820P	Metal	82 ohms 2W	R909	ERJ6GEYJ223V	Carbon	22K ohms 1/10W
R368	ERJ6GEYJ103V	Carbon	10K ohms 1/10W	R910	ERJ6GEYJ221V	Carbon	220 ohms 1/10W
R369	ERDS2TJ103T	Carbon	10K ohms 1/4W	R911-913	ERG3SJ180	Metal	18 ohms 3W
R401	ERDS2TJ102T	Carbon	1K ohms 1/4W	R914	ERG5SJ333P	Metal	33K ohms 5W
R405	ERJ6GEYJ393	Carbon	39K ohms 1/10W	R915	ERX3SJR33P	Metal	0.33 ohms 3W
R406	ERJ6ENF3602V	Metal	36K ohms 1/10W	R916	ERJ6GEYJ222V	Carbon	2.2K ohms 1/10W
R407	ERJ6ENF1802V	Metal	18K ohms 1/10W	R917	ERJ6GEYJ102V	Carbon	1K ohms 1/10W
R408	ERJ6ENF4702V	Metal	47K ohms 1/10W	R918	ERG5SJ183	Metal	18K ohms 5W
R409	ERJ6GEYJ102V	Carbon	1K ohms 1/10W	R919	ERJ6GEYJ152V	Carbon	1.5K ohms 1/10W
R410,411	ER0251KF3R00	Metal	3 ohms 1/4W	R920	ERJ6GEYJ561V	Carbon	560 ohms 1/10W
R412	ERJ6GEYJ4R7V	Carbon	4.7 ohms 1/10W	R921	ERJ6GEYJ102V	Carbon	1K ohms 1/10W
R413	ERJ6GEYJ222V	Carbon	2.2K ohms 1/10W	R922	ERJ6GEYJ152V	Carbon	1.5K ohms 1/10W
R414	ERG1SJ331	Metal	330 ohms 1W	R923,924	ER050CKF1302	Metal	13K ohms 1/10W
R415	ERJ6GEYJ683V	Carbon	68K ohms 1/10W	R925	ERDS2TJ103T	Carbon	10K ohms 1/4W
R501	ERJ6GEYJ152V	Carbon	1.5K ohms 1/10W	R926	ERJ6GEYJ153V	Carbon	15K ohms 1/10W
R502	ERJ6GEYJ821	Carbon	820 ohms 1/10W	R928	ERJ6ENF1601V	Metal	1.6K ohms 1/10W
R503	ERJ6GEYJ272V	Carbon	2.7K ohms 1/10W	R931	ERJ6GEYJ152V	Carbon	1.5K ohms 1/10W
R504	ERG5SJ103	Metal	10K ohms 5W	R932	ERDS2TJ102T	Carbon	1K ohms 1/4W
R505	ERJ6GEYJ682V	Carbon	6.8K ohms 1/10W	R933	ERDS2TJ472T	Carbon	4.7K ohms 1/4W
R506	ERJ6GEYJ273V	Carbon	27K ohms 1/10W	R934,935	ERJ6GEYJ152V	Carbon	1.5K ohms 1/10W
R507	ERDS2TJ272T	Carbon	2.7K ohms 1/4W	R936	ERJ6ENFJ473V	Carbon	47K ohms 1/10W
R512	ERJ6GEYJ472V	Carbon	4.7K ohms 1/10W	R939	ERJ6GEYJ104V	Carbon	100K ohms 1/10W
R513	ERJ6GEYJ103V	Carbon	10K ohms 1/10W	R941,942	ERJ6GEYJ102V	Carbon	1K ohms 1/10W
R514,516	ERJ6GEYJ152V	Carbon	1.5K ohms 1/10W	VR401	EVNDCAA03B54	Variable Resistor	50K ohms
R517	ERJ6GEYJ124	Carbon	120K ohms 1/10W	VR403	EVMEGSA00B23	Variable Resistor	2K ohms
R518	ERJ6GEYJ104V	Carbon	100K ohms 1/10W	C101,102	EEUEB1H100SB	Electrolytic	10 µF 50V
R519	ERJ6GEYJ912	Carbon	9.1K ohms 1/10W	C103,104	F1J1H102A400	Ceramic	1000 pF
R520	ERDS2TJ103T	Carbon	10K ohms 1/4W	C105	EEUEB1A101B	Electrolytic	100 µF 10V
R521	ERJ6GEYJ331V	Carbon	330 ohms 1/10W	C106,107	F1J1H103A021	Ceramic	0.01 µF
R522	ERJ6GEYJ152V	Carbon	1.5K ohms 1/10W	C108	EEUEB1A101B	Electrolytic	100 µF 10V
R523	ERJ6GEYJ273V	Carbon	27K ohms 1/10W	C109,110	F1J1H103A021	Ceramic	0.01 µF
R524	ERJ6GEYJ103V	Carbon	10K ohms 1/10W	C111,112	MCUV1E104KBN	Ceramic	0.1 µF
R525	ERJ6ENF3301	Metal	3.3K ohms 1/10W	C123	F1J1H103A021	Ceramic	0.01 µF
R526	ERJ6ENF1102V	Metal	11K ohms 1/10W	C124	MCUV1H820JCN	Ceramic	82 pF
R528	ERJ6GEYJ333V	Carbon	33K ohms 1/10W	C125	F1J1H102A400	Ceramic	1000 pF
R529	ERJ6GEYJ102V	Carbon	1K ohms 1/10W	C127	EEUEB1E101B	Electrolytic	100 µF 25V
R530	ERJ6GEYJ471V	Carbon	470 ohms 1/10W	C128	EEUEB1H4R7SB	Electrolytic	4.7 µF 50V
R531	ERJ6GEYJ473V	Carbon	47K ohms 1/10W	C129	EEUEB1H100SB	Electrolytic	10 µF 50V
R532	ERJ6GEYJ333V	Carbon	33K ohms 1/10W	C130	EEUEB1H2R2SB	Electrolytic	2.2 µF 50V
R601	ERJ6GEYJ101V	Carbon	100 ohms 1/10W	C131	YF400681CHJT	Ceramic	680 µF 50V
R603	ERJ6GEYJ103V	Carbon	10K ohms 1/10W	C132	EEUEB1H1R0SB	Electrolytic	1 µF 50V
R609	ERJ6GEYJ102V	Carbon	1K ohms 1/10W	C133	MCUV1E104KBN	Ceramic	0.1 µF
R610	ERG1SJ101	Metal	100 ohms 1W	C134	F1J1H102A400	Ceramic	1000 pF
R611	ERJ6GEYJ103V	Carbon	10K ohms 1/10W	C135,136	EEUEB1E470B	Electrolytic	47 µF 25V
R612	ERJ6GEYJ224V	Carbon	220K ohms 1/10W	C137,138	YF400223XKT	Ceramic	0.022 µF
R613	ERJ6GEYJ681V	Carbon	680 ohms 1/10W	C139	EEUEB1H100SB	Electrolytic	10 µF 50V
R614	ERDS2TJ123T	Carbon	12K ohms 1/4W	C140	F1J1H2200004	Ceramic	22 pF
R615	ERD50FJ4R7	Carbon	4.7 ohms 1/2W	C142-144	YF400683XKT	Ceramic	0.068 µF

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
C145	MCUV1E104KBN	Ceramic	0.1 μ F	C601	EEUEB1H1R0SB	Electrolytic	1 μ F 50V
C146	YF400223XKT	Ceramic	0.022 μ F	C606	EEUEB1E101B	Electrolytic	100 μ F 25V
C147	EEUEB1H2R2SB	Electrolytic	2.2 μ F 50V	C607	F1J1H272A400	Ceramic	2700 pF
C149	F1J1H9R0A408	Ceramic	9 pF	C608	EEUEB1H1R0SB	Electrolytic	1 μ F 50V
C154	F1J1H103A021	Ceramic	0.01 μ F	C609	EEUEB1H1R7SB	Electrolytic	4.7 μ F 50V
C155	ECA1CHG102B	Electrolytic	1000 μ F 16V	C610	EEUEB1H100SB	Electrolytic	10 μ F 50V
C156	YF400223XKT	Ceramic	0.022 μ F	C611	F1J1H473A022	Ceramic	0.047 μ F
C157	EEUEB1H1R0SB	Electrolytic	1 μ F 50V	C612	ECA1CHG102B	Electrolytic	1000 μ F 16V
C158	EEUEB1H100SB	Electrolytic	10 μ F 50V	C613	EEUEB1E331B	Electrolytic	330 μ F 25V
C159	F1J1H103A021	Ceramic	0.01 μ F	C901,902 Δ	YWX75M104VS1	Plastic	0.1 μ F
C162	MCUV1E104KBN	Ceramic	0.1 μ F	C903-905 Δ	ECKDNA102ME	Ceramic	1000 pF
C207	F1J1H331A410	Ceramic	330 pF	C907	ECOS2GA121BB	Electrolytic	120 μ F 40V
C208	MCUV1E104KBN	Ceramic	0.1 μ F	C908	EEUEB1E101B	Electrolytic	100 μ F 25V
C210,211	MCUV1E104KBN	Ceramic	0.1 μ F	C909	MCUV1E104KBN	Ceramic	0.1 μ F
C216	EEUEB1H100SB	Electrolytic	10 μ F 50V	C910	EEUFC1V181B	Electrolytic	180 μ F 35V
C221	EEUEB1H1R0SB	Electrolytic	1 μ F 50V	C911	ECQB1H683JM3	Plastic	0.068 μ F 50V
C301	ECA0JHG222B	Electrolytic	2200 μ F 6.3V	C912	YWF-E2K1041S1	Plastic	0.1 μ F 250V
C302,303	F1J1H103A021	Ceramic	0.01 μ F	C913	YWBC5221KH	Ceramic	220 pF
C305	MCUV1E104KBN	Ceramic	0.1 μ F	C914	EEUFC1V181B	Electrolytic	180 μ F 35V
C306	F1J1H330A410	Ceramic	33 pF	C915	ECA2CHG101	Electrolytic	100 μ F 160V
C307	YF400120CHJT	Ceramic	12 pF	C916	ECA2CHG470B	Electrolytic	47 μ F 160V
C309	F1J1H102A400	Ceramic	1000 pF	C917	ECA1EHG102B	Electrolytic	1000 μ F 25V
C310,311	F1J1H101A410	Ceramic	100 pF	C918	ECQE2153JF	Plastic	0.015 μ F
C312,313	MCUV1E104KBN	Ceramic	0.1 μ F	C919	F1J1H332A400	Ceramic	3300 pF
C314	EEUEB1E470B	Electrolytic	47 μ H 25V	C920,921	EEUEB1E471B	Electrolytic	470 μ F 25V
C315-317	MCUV1E104KBN	Ceramic	0.1 μ F	C923	EEUEB1A471B	Electrolytic	470 μ F 10V
C318-322	F1J1H102A400	Ceramic	1000 pF	C924	MCUV1E104KBN	Ceramic	0.1 μ F
C401	EEUEB1E101B	Electrolytic	100 μ F 25V	C925,926	EEUEB1H100SB	Electrolytic	10 μ F 50V
C402	ECQV1H105JL3	Plastic	1 μ F 50V	VC301	B0CDAB000006	Variable Resistor	
C404	EEUEB1H101SB	Electrolytic	100 μ F 50V	L106	G0C150K00001	Coil	
C405	YF400100CHDT	Ceramic	10 pF	L301	YWLAP2TA330K	Coil	33 μ H
C406	ECSF1VE225	Tantalum	2.2 μ F35V	L501	G0D181000001	Coil	
C407	EEUFC1E681B	Electrolytic	680 μ F 25V	L502	G2ZZ00000016	Coil	
C408,409	YF400223XKT	Ceramic	0.022 μ F	L901 Δ	YW0.7A453F28	Coil	
C410,411	F1J1H103A021	Ceramic	0.01 μ F	L903,904	YWFL5R200	Coil	5.2 μ H
C412	MCUV1E104KBN	Ceramic	0.1 μ F	L905,906	YWCD2912221	Coil	
C501,502	YWBC7182KH	Ceramic	1800 pF	L910	ELEAC470KA	Coil	47 μ H
C503	ECA2VHG4R7B	Electrolytic	4.7 μ F350V	T501	TLH15412	Low Freq Transformer	
C504	ECWH16272HV	Plastic	2700 pF 16V	T502 Δ	G4G2D0000001	Flyback Transformer	
C505	ECWH16222HV	Plastic	2200 pF 16V	T901 Δ	G4D3A0000007	High Freq Transformer	
C506	ECKD3D121KBP	Ceramic	120 pF	SW101	YWSPUP192WNS	Push Switch	
C507	F0A2E1540001	Plastic	0.15 μ F 250V	SW301-305	K0H1BB0000042	Tact Switch	
C508,509	YWBC7182KH	Ceramic	1800 pF	SW901 Δ	YWSDDFA3	Push Switch	
C510	ECA1EHG102B	Electrolytic	1000 μ F 25V	X101	H2A156200001	Oscillator	
C512	ECA2CHG220B	Electrolytic	22 μ F 160V	X102	H0D443400011	Crystal Oscillator	
C513	MCUV1E104KBN	Ceramic	0.1 μ F	X301	H2A800400005	Oscillator	
C514	EEUEB1H2R2SB	Electrolytic	2.2 μ F 50V	SF501 Δ	K5G631A00002	Current Fuse	0.63A
C515	MCUV1E104KBN	Ceramic	0.1 μ F	F901 Δ	K5D402BK0002	Current Fuse	4A
C516	EEUEB1H1R0SB	Electrolytic	1 μ F 50V	JK601	YWT5854AAAG	Jack	
C517	EEUEB1E101B	Electrolytic	100 μ F25V	CN101,102 Δ	YWP2325	Connector	
C518	EEUEB1H100SB	Electrolytic	10 μ F 50V	CN301	K1KA04A00173	4-pin Connector	
C519	YF400271CHJT	Ceramic	270 pF	CN401 Δ	K1KA04A00172	4-pin Connector	
C520	YF400333XKT	Ceramic	0.033 μ F	CN601 Δ	K1KA03A00083	3-pin Connector	
C521	F1J1H180A410	Ceramic	18 pF	CN901 Δ	YWM1818	AC Connector	
C522	F1J1H102A400	Ceramic	1000 pF	CN902	YWB2P3VH	3-pin Connector	

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
C101	K1PC06D00001	Wire Assy for CRT Board CN004	ACCESSORY PARTS / PACKAGING PARTS		
E102	YW49USPACER	Insulator Crystal Spacer			
E501	K1PC05D00001	Wire Assy for CRT Board CN805	E1	△ YWSP60VVF20	AC Power Cable Assy for WV-CM1020/B
E901	YWSK0279	Fuse Holder		YWACP45G	AC Power Cable Assy for WV-CM1020/G
E902	YWSK0200	Fuse Holder	M41	△ YWV8QA5238AN	Operating Instructions
E904	K4DJD0000016	Wire Assy for CRT Board CN801	M42	PE26X40C05B	Polyethylene Bag
E912	YWMEP1866	Terminal	M43	PE20X35C05B	Polyethylene Bag
E913	YFCD20ACCAP	Insulator Cap for E914	M45	XZB60X70A05	Polyethylene Bag
E914	YWVM1910L09	Ground Wire	M46	V9CA4058AN	Packaging Assy
M14	YVW2NA0463B3	Spacer	M47	YWV7SA2037A3	Bar Cord Label
M15	YVW7DA1112A2	Heat Sink (X3)			
M16	YVW7DA1113A3	Heat Sink			
M23	YVW5WA2534A2	Rear Panel			
CRT BOARD					
PCB2(RTL)	VM102EKC1AYP	Printed Circuit Board Assy			
Q801-803	2SC3063	Transistor			
D801,802	YW1T2TA	Diode			
R802,804	ERG3SJ682P	Metal			
R806	ERG3SJ682P	Metal			
R807-809	ERC14GK332C	Solid			
R810-812	ERJ6GEYJ101V	Carbon			
R814	ERJ6GEYJ332V	Carbon			
R815	ERJ6GEYJ561V	Carbon			
R816	ERJ6GEY0R00V	Carbon			
R817	ERJ6GEYJ332V	Carbon			
R818	ERJ6GEYJ561V	Carbon			
R820	ERJ6GEYJ332V	Carbon			
R821	ERJ6GEYJ561V	Carbon			
R822	△ ERQ12AJ3R3P	Carbon			
C802	F1J1H181A410	Ceramic			
C803	YF400120CHJT	Ceramic			
C804	F1J1H121A410	Ceramic			
C806	F1J1H181A410	Ceramic			
C807	ECA2VHG4R7B	Electrolytic			
C808	ECKD3D122KBP	Ceramic			
C809	ECA2VHG4R7B	Electrolytic			
CN801,802	YWRT01T1.3B	1-pin Connector			
CN803	△ K3B09EA00001	CRT Socket			
CN804	K1KA06A00161	6-pin Connector			
CN805	K1KA05A00124	5-pin Connector			
CN806	YWB1PLVTN	1-pin Connector			

